# Cognitive Behavioral Therapy for Prolonged Postdisaster Distress

▼

Jessica L. Hamblen
*National Center for PTSD and Dartmouth Medical School*

▼

Laura E. Gibson
*National Center for PTSD and University of Vermont*

▼

Kim T. Mueser
*Dartmouth Medical School*

▼

Fran H. Norris
*National Center for PTSD and Dartmouth Medical School*

In this article, we present and illustrate cognitive-behavioral therapy for postdisaster distress. The treatment is for individuals who show more than normal transient stress after disaster and functions as an intermediate step between traditional crisis counseling and longer-term mental health treatments. Thus, it is one part of a larger mental health disaster response and is designed to be implemented no sooner than 60 days post disaster. A clinical case demonstrates its process and technique in a community practice setting. © 2006 Wiley Periodicals, Inc.* J Clin Psychol: In Session 62: 1043–1052, 2006.

Keywords: disaster; psychotherapy; crisis; posttraumatic stress disorder (PTSD); cognitive-behavioral therapy


Correspondence concerning this article should be addressed to: Jessica L. Hamblen, National Center for PTSD, VA Medical Center (116D), 215 North Main Street, White River Junction, VT 05009; e-mail: jessica.hamblen@dartmouth.edu

JOURNAL OF CLINICAL PSYCHOLOGY: IN SESSION, Vol. 62(8), 1043–1052 (2006) 
Published online in Wiley InterScience (www.interscience.wiley.com). DOI: 10.1002/jclp.20288

The psychological effects of disasters can be deleterious and far-reaching. Posttraumatic stress disorder (PTSD) and depression are highly prevalent, often comorbid, and sometimes chronic conditions that emerge in the aftermath of major disasters, especially those that involve threat or loss of life and severe community disruption (Norris et al., 2002). Unfortunately, there is little controlled research on the treatment outcomes specific to disaster-related distress. However, numerous studies have documented treatment success after a broader range of potentially traumatic life events, and these studies provide valuable guidance on developing effective interventions for disaster victims.

In this article, we describe how we extended earlier work to create an 8- to 12-session cognitive-behavioral treatment for a range of psychological problems that may persist after exposure to disaster or mass violence. We present an illustration of how this treatment enabled a seriously traumatized disaster victim to examine and reframe her inaccurate thoughts related to her experience and find renewed hope for her life.

## Treatments for Trauma-Related Disorders

The two psychological treatments for PTSD that have been most extensively researched are cognitive-behavioral therapy (CBT) and eye movement desensitization and reprocessing (EMDR). A recent review (Bisson & Andrew, 2005) and metaanalysis of psychotherapy for PTSD (Bradley, Greene, Russ, Dutra, & Westen, 2005) concluded that there is evidence that both are effective in the treatment of PTSD. The metaanalysis concluded that over 50% of patients who complete treatment with various forms of cognitive-behavioral therapies improve (Bradley et al., 2005).

The components of CBT associated with the largest effects in the treatment of PTSD are cognitive restructuring (CR) and exposure (e.g., Foa, Rothbaum, Riggs, & Murdock, 1991; Resick, Nishith, Weaver, Astin, & Feuer, 2002). CR is based on the premise that inaccurate thinking and negative trauma-related beliefs cause or exacerbate painful emotions and avoidance of trauma-related stimuli. Proponents of CR assert that by helping people to challenge their problematic thinking patterns, clinicians can help them to reduce their distress. Exposure therapy posits that individuals who have PTSD have developed a conditioned fear response to thoughts, feelings, and situations that evoke memories of their traumatic experience. Prolonged exposure to feared stimuli that is not accompanied by negative events can correct inaccurate beliefs that these stimuli are dangerous and lead to habituation of the anxiety and reduction of avoidance (Foa & Kozak, 1986).

Several studies have compared the effects of CR to exposure; most have found comparable benefit (e.g., Resick et al., 2002). However, in one 5-year follow-up study comparing the two, participants who received CR were less likely to meet criteria for PTSD and showed fewer PTSD symptoms than participants who received exposure (Tarrier & Sommerfield, 2004). Studies that compare exposure alone to exposure plus CR have mixed results: one showed improved outcomes with the addition of CR (Bryant et al., 2003), and the other found no added benefit of CR (Foa et al., 2005).

A trial of behavioral therapy was conducted in Turkey 3 years after an earthquake (Basoglu, Salcioglu, Livanou, Kalender, & Acar, 2005). Findings suggested that single-session behavioral treatment given approximately 3 years post disaster produced substantial decrease in PTSD symptoms. Given the promising implications of this trial for expedient and cost-effective treatment, these results warrant replication.

Although EMDR remains somewhat controversial its research support is growing. Several randomized controlled trails have been published over the last few years that suggest that EMDR is effective in reducing PTSD symptoms. More than half of patients

completing PTSD treatment with EMDR improve (Bradley et al., 2005). The five RCTs comparing EMDR and other CBT approaches found minimal differences in outcomes between the treatments.

Although EMDR is associated with a reduction of PTSD symptoms, the treatment remains controversial. The main controversy is not about whether it works, but whether it is a unique treatment, rather than just another form of CBT. In addition, many of the EMDR trials to date suffer from methodological limitations that raise questions about the results (Hertlein & Ricci, 2004).

In summary, the weight of the extant evidence supports the use of CBT for treating PTSD. Research on EMDR indicates it is beneficial, but the quality of the EMDR studies and the delineation of the active mechanisms are not as strong as those for CBT, to date.

## CBT for Postdisaster Distress

A manualized cognitive behavioral therapy for postdisaster distress (Hamblen et al., 2003) was developed for use by Project Liberty (a federally funded crisis-counseling program) after the September 11, 2001, terrorist attacks and was implemented again after the series of Florida hurricanes in 2004. It is one part of a larger mental health disaster response and is designed to be implemented no sooner than 60 days post disaster. This treatment is for individuals who show more than normal transient stress and who require more than traditional crisis counseling. Some people who have more complicated mental health needs will require referral for more intensive treatment afterward and further services. Thus, CBT for postdisaster distress is an intermediate step between crisis counseling for individuals immediately after a trauma and longer-term mental health treatments.

CBT for postdisaster distress incorporates techniques that have been shown to be effective with a host of symptoms commonly seen in disaster survivors, such as anxiety, depression, fears, phobias, substance abuse, grief, and anger, which interfere with daily functioning. It is not intended to be a treatment for a specific psychiatric disorder. The treatment entails 8–12 sessions divided into three main sections: psychoeducation, coping skills, and cognitive restructuring. Clients receive a workbook and complete assignments to reinforce the skills they have learned in session.

### *Psychoeducation*

The focus of the first session is to provide clients with an understanding of common reactions to disaster. *Psychoeducation* is one way to normalize clients' reactions and remove some of the stigma they may be feeling. If done properly, it can also provide a rationale for why clients are experiencing their distress. The workbook includes educational information on common reactions, such as fear and anxiety, sadness and depression, guilt and shame, and anger; PTSD symptoms; symptoms of depression, anxiety, substance use, grief, and bereavement; sleep problems and nightmares; and impairments in functioning. By focusing on clients' problems, the therapist begins to tailor the treatment and build rapport and trust.

### *Coping Skills*

Beginning in session two, the coping section teaches clients some immediate ways of managing their distress as well as skills for decreasing future distress. Two main skills are taught, breathing retraining and pleasant activity scheduling. *Breathing retraining* is a

skill for managing and decreasing anxiety. It involves teaching clients how to slow their breathing in order to reduce hyperventilation by taking in normal breaths and exhaling slowly often while reciting a soothing self-statement such as "Calm" or "Relax." Clients are reminded of the "fight or flight" response and told that under threat people respond by taking in excess oxygen. Breathing retraining counteracts that automatic response and thereby slows down the intake of oxygen. After the therapist models the skill, the client practices it first in session and then for homework under calm conditions. Later, when clients become more proficient at the skill, they are encouraged to use it to calm themselves when anxious.

Next, clients are taught about the relationships among thoughts, feelings, and behaviors: that negative behaviors are connected to negative moods and positive behaviors are connected to positive moods. *Pleasant activity scheduling* is introduced as an effective way to combat depression and avoidance. Some clients immediately take to the idea of increasing positive activities in their life. They enjoy reviewing the list of potential activities and identifying new ones to try. Others react more negatively, stating, "I don't have time to do these things; I am stressed as it is." For example, one 9/11 victim, who had lost his wife when the towers collapsed, was trying to raise two small children and thought that he had no time in his day for added activities. The therapist helped him identify cooking as a past hobby, which he now said was more of a chore. Together the client and therapist brainstormed that the client could look for new recipes on the Internet on the weekend (when he had more time) and then cook one new meal a week. The client reported later that cooking had been very enjoyable and that he was looking forward to the next weekend to pick a new recipe.

### *Cognitive Restructuring*

In session three, clients are introduced to the concept that people's emotional reactions to events are determined by their interpretations of those events. These interpretations may be influenced by other events they have experienced, including traumatic events. Clients are informed that different types of negative feelings are associated with specific types of thoughts, which are often automatic and occur outside their awareness. Specifically, clients are taught that feelings of *depression* tend to be related to thoughts about loss of something, *anxiety* to thoughts about potential threat, *anger* to thoughts about having been wronged, and *guilt* or *shame* to thoughts about having done something wrong. Understanding what types of thoughts underlie different negative feelings can help clients identify the thoughts that are leading to the negative emotion.

In session four, clients are introduced to the *cognitive distortions* (called *problematic thinking styles*) that may result from basing current thinking on past traumatic experiences. For example, clients who have experienced traumatic events often "catastrophize" or "overestimate risk" in situations in which there is no reason to suspect that something bad will happen. Clients are apprised of common problematic thinking styles and are helped to identify and correct distortions related to negative emotions.

Thereafter, clients are introduced to a five-step CR method for dealing with negative emotions (Mueser, Rosenberg, Jankowski, Hamblen, & Descamps, 2004). These steps are summarized on a worksheet, which is both used in the session with the therapist and practiced by the client outside the session independently or with the help of another person. The *five steps of CR* are as follows: (1) Describe the situation, (2) identify the negative feeling, (3) identify the thought related to the feeling, (4) challenge the thought, and (5) make a decision. Each step is elaborated in the following and then illustrated by a real case.

In step 1, the client described the upsetting situation. In this case, the situation was *thinking about taking the train to Penn Station*. In step 2, he identified the strongest feeling. CR is most effective when it focuses on one feeling at a time, and the most productive feeling to work on is usually the feeling that produces the most distress. He identified *fear* as the strongest feeling. In step 3, the client identified different thoughts that seem to be related to the negative feeling and then selected the thought that is most strongly related to the feeling. In this example, the fear is evoked by the thought *Penn Station is unsafe because it could be a terrorist target and I could get trapped underground*.

In step 4, evidence for and against the thought is generated. Clients are first encouraged to generate as much evidence as they can to support their thought. This technique differs a bit from more traditional CR, in which only objective and unambiguous evidence is allowed. We believe that if clients share all of their evidence to support their thoughts, they will be more likely at the end to change those thoughts. Next, clients generate as much evidence as they can to refute their thought.

In the case of the client who was afraid of Penn Station, evidence in support of the thought that there will be a terrorist attack at Penn Station and that the client would be trapped included that *(1) New York has been the target of several terrorist attacks; (2) if terrorists hit Penn Station, people will panic and I won't be able to get out; and (3) the subways stopped on 9/11 and people were trapped*. Evidence against the thought included that *(1) it is extremely unlikely that Penn Station will be a target and even more unlikely that I would be there when it happened; (2) although people were very upset during 9/11, there was not widespread panic, and in fact, there were many stories of people helping each other out of the Twin Towers; (3) even though the subway was stopped on 9/11, that did not mean that people were killed; and (4) the New York Transit Authority is aware of the problem and is probably working on a better system to evacuate passengers in the case of emergency*.

Step 5 is make a decision. After all of the evidence has been reviewed, the client makes a decision as to whether the evidence supports the thought or belief. Because clients may have difficulty objectively evaluating evidence about themselves, it can be useful to ask the person whether he or she would consider the evidence convincing if another person were in the same circumstance. Once a more accurate thought has been identified, the therapist helps the client practice it and develop ways to cue himself or herself to recall it when a similar situation evokes the same old feelings (and old thoughts). In this example, the distressing thought that Penn Station is unsafe was replaced with the alternative thought *Even though I feel afraid, there is no reason to believe that Penn Station is unsafe. Lots of other people think it is safe*.

On some occasions, the evidence does support the core thought, and when this occurs, the making-a-decision step requires that the client develop an action plan for dealing with the situation. Action plans that address rational negative feelings are developed by using a problem-solving approach, in which the primary goal is to identify a series of actions that will address the problem. Sometimes these actions involve gathering more information; at other times concrete steps may need to be taken to resolve the situation.

Although the make-a-decision step often involves either identifying a more accurate thought or deciding on a plan to address the situation, in some circumstances both actions may be taken. When this occurs, a more accurate thought that reduces some of the negative emotion may be identified, as well as a plan for managing the residual negative feelings. In the case example, the action plan was to remember to use his breathing in the situation, to repeat the alternative thought to himself, and to travel with a friend. However, it could also involve generating some behavioral experiments such as riding the train a short distance, then riding the train to Penn Station with a friend, and then riding the train alone. Thus, therapists can introduce some exposure components.

Clients practice CR for the remainder of the treatment sessions. The goal is to help clients move from learning CR as a skill to applying it to their disaster-related thoughts and from using the formal CR worksheet to completing the steps mentally when they are in an upsetting situation or immediately afterward.

## Case Illustration

This illustration is a composite of cases seen after a major hurricane. We chose to present a composite because it both increases patient confidentiality and allows us to illustrate several different important points through a single case. In this case example, the survivor lost her home and experienced significant symptoms of postdisaster distress.

### *Presenting Problem: Client Description*

Sara initially stated, "I can't live my life anymore. I'm a bad mother. I have no place to live, no job, no family, no friends. I used to be tough; now I am nothing." Sara was a 25-year-old single white woman who had a 7-year-old daughter. Approximately 6 months ago she and her daughter evacuated their apartment just before a category 4 hurricane passed through town. The hurricane destroyed their home and everything else around it. Sara and her daughter went to a shelter that was overcrowded and understaffed, had no power, and had minimal food and water. While at the shelter, Sara and her daughter witnessed the sexual assault of a teenage girl. Sara had tried to help the girl by informing a police officer who was outside the shelter, but he refused to enter and help, saying it was "too dangerous." Sara and her daughter left the shelter after 6 days and moved to a hotel arranged for by the Federal Emergency Management Agency (FEMA). FEMA told Sara that she needed to find her own place to live, and she moved back in with friends. Sara was concerned that the friends had said yes just to be nice, but she had nowhere else to go.

Sara was an only child. Her parents never married and she never knew her biological father. Sara described herself as a "wild" teenager. She drank alcohol at age 12 and began smoking marijuana at 14. She denied any other drug use. Sara reported that she did "OK" in elementary school but that things "fell apart" in junior high after her mother's boyfriend moved in with them. At 17, Sara became pregnant and her mother kicked her out of the house because the mother's boyfriend "didn't want to live with a baby."

Sara lived with friends and finished high school. After graduation she moved into a small apartment with her daughter. For the past 5 years, she had worked as a waitress. The restaurant was also destroyed by the hurricane, and so Sara lost her job.

Sara reported feeling hopeless about her future. She said that she could not see how conditions were ever going to improve because she had "nothing left." In addition, she reported that she could not stop thinking about what she witnessed at the shelter. She felt guilty that she did not stop the sexual assault ("I'm as bad as my own mother") and worried that her own daughter now felt unprotected.

### *Case Formulation*

Sara was functioning in a stable, albeit limited manner before the hurricane. She was employed and provided financially and psychologically for her daughter and herself. Her many strengths allowed her to overcome a difficult childhood. After the hurricane and the subsequent events, she began to question her self-worth. She experienced shame about witnessing the sexual assault and was having trouble finding a new job and apartment.

Sara was experiencing a range of posthurricane symptoms, including intrusive thoughts about the sexual assault, frightening images of the shelter, increased arousal, and a lack of interest in activities she used to enjoy. Although some symptoms are normal early after a disaster, Sara's symptoms were more prolonged and were causing interference in her functioning. Although formal diagnosis is not past of the treatment, Sara likely met criteria for PTSD and major depression. The focus of the CBT was to help Sara identify the thoughts that were leading to her distress, to challenge those thoughts, and ultimately either to replace them with more accurate and helpful thoughts or to develop an action plan. If Sara could develop alternative thoughts that were more accurate and less distressing, then she could function well enough to search for a new job and housing.

### *Course of Therapy*

Sara attended nine 55-minute sessions. Sessions were weekly in the beginning and then tapered to every other week for the last two sessions. Sara was motivated and liked the structured sessions. She worked hard on the practice exercises outside sessions. Sara was readily able to identify symptoms related to the disaster. In particular she identified feelings of guilt and shame as well as intrusive thoughts. What follows is an excerpt related to guilt:

THERAPIST: After a disaster it is common for people to experience guilt over things they wish they had done differently. Do you ever feel guilty?
SARA: Yeah, I wish I had helped that girl. It's my fault she got raped.
THERAPIST: Why do you think it is your fault? What more could you have done?
SARA: I don't know, but I was there and I didn't do anything. That could have been my daughter.
THERAPIST: I understand your feelings. And you should know that these feelings are common. I'd like to examine this thought more closely with you when we get to the cognitive restructuring, which often helps people with these feelings. Would that be okay?
SARA: Maybe, but I'm not sure it will help.

In the coping segment of the treatment Sara took quickly to the breathing retraining. After a few nights of practice Sara reported that she used the breathing whenever she got "stressed out" and that it helped her "calm down and think things through." She had more difficulty with scheduling pleasant activities, saying she "felt guilty" and "shouldn't pamper myself." She felt she either needed to be out looking for a job or spending time with her daughter. However, with some encouragement from the therapist and a little luck, Sara was able to engage in some more enjoyable activities.

SARA: So I finally did a pleasant activity (smiling).
THERAPIST: Really? What did you do?
SARA: Well, my daughter got invited over to a friend's house. At first I ran around doing errands, but then I found myself alone at home. So I brought the radio into the bathroom and took a bubble bath. It was great. I felt relaxed for the first time in a long time. When my daughter came home I wasn't as stressed as usual and so we ended up playing a board game together. It was really nice. I realized that just being in the same house isn't really *being* together and that I need to do more activities with her. But I can't do that when I am stressed. So, I guess it worked out well.

Cognitive restructuring is the core of the treatment. Once Sara learned the five steps of CR she was able to begin to challenge some of her core beliefs. Through this process Sara was able to realize that she could not have helped the teenage girl and that by leaving the site of the crime, she in fact did protect her own daughter. What follows is a segment of the CR Sara did to the thought "It's my fault that girl was raped."

THERAPIST: Okay, so the upsetting situation is thinking about the girl who was raped in the shelter. You said that the feeling that is evoked is guilt and shame and that the thought is that it was your fault.

SARA: Right

THERAPIST: So, in step 4 you gather evidence for and against the thought. Let's go ahead and pull out your worksheet so that we can write all this down. Now, what evidence do you have that it was your fault the girl was raped? What makes you think that?

SARA: Well I saw it happening. I was the only one there and I didn't do anything. I should have stopped it.

THERAPIST: Okay, so why don't you write, you saw it happening and then that you didn't do anything (Sara writes this on her worksheet). Now, what evidence can you come up with that it was not your fault?

SARA: None. There is no excuse. I knew what was happening, and I didn't do anything.

THERAPIST: Really? Tell me what you did when you saw the girl being raped.

SARA: Well, I was taking my daughter to the bathroom. They were so gross at this point. They had run out of toilet paper and there was no running water. But there was no place else to go. So we were heading into the bathroom when I saw these three young men raping a teenage girl in the corner. She was pinned up against the wall and sort of crying. I yelled "Hey, stop that" and then one of the men turned around to face me. He was holding a knife and made sort of a stabbing gesture. I got scared so I left.

THERAPIST: Then what did you do?

SARA: Well, like I told you before, I left the shelter and went outside to find a cop. There were no cops inside the shelter, but there were plenty out front telling people that the shelter was full. Anyway, I told him what happened and it was like he didn't care. He just said "Sorry, nothing I can do about it. I'm not going in there." I was really pissed and I started yelling at him. Then he said if I didn't calm down he wouldn't let me back inside the shelter. If I didn't have my daughter I would have really blown up, but she needed someplace to stay, even if it was the shelter. So I just went back inside.

THERAPIST: Okay, so it sounds like first you tried to stop things on your own and when that didn't work you tried to get help.

SARA: Yeah.

THERAPIST: Let's write those two things down on the worksheet under things that don't support the thought that it was your fault. You tried to stop them yourself and you tried to get the police to help you. Do you think you would have been more likely to help if the men didn't have a knife?

SARA: I don't know. There were still three of them so I am not sure what I could do. Especially since I had my daughter with me.

THERAPIST: So maybe we should add that, too.

SARA: What?

THERAPIST: That they had a weapon, that there were three of them, and that you had your daughter to protect.

SARA: I guess so (writes).

THERAPIST: What happened next?
SARA: Well I headed back to the bathroom but when I put my hand on the door my daughter started crying. I have never seen her like that. She was screaming, "Mommy, no, they'll hurt you; don't go in there." I tried to calm her down but she just kept screaming. Finally, I just walked away and we used another bathroom.
THERAPIST: So, your daughter became frantic and afraid.
SARA: Yes. Should I write that down?
THERAPIST: If you think it is evidence against the thought that it was your fault.

In this example, Sara began to challenge a core belief that she was a bad person and mother because she did not stop the sexual assault of a teenage girl. Through the process of evaluating and challenging her thinking, Sara was able to recognize that she did everything she could. She developed the new, balanced thought *I did what I could given the circumstances. My first responsibility was to protect my daughter and I did that*. Over time, and with practice, Sara was able to replace the old thought with the new, more accurate one.

### *Outcome and Prognosis*

Sara responded well to CBT for postdisaster distress. With the help of the therapist, she developed new skills for managing her distress, including recognizing her symptoms, using breathing retraining when upset, engaging in more pleasurable activities, and challenging negative thoughts. Sara spoke with her friends and learned that they did not want her to move out (a thought she challenged in CR that resulted in an action plan in which Sara would actually ask her friends whether they wanted her to leave). With the reduced stress associated with having a place to live and improved self-confidence, Sara was able to locate a new waitressing job.

At the end of treatment, Sara's mood was improved. She was no longer hopeless and she believed that she and her daughter had a future again. In addition, the intrusive thoughts about the sexual assault significantly decreased once she challenged her guilt over the event. She reported that she still "worried" a lot, but said this was no different from before the hurricane. The one thought she still struggled with was that she could not protect her daughter from all the "bad in the world." Sara said that after seeing how fast things change, that people can lose their homes, their jobs, everything that is important to them, and in seeing how crazy the world is, she just worries more about her daughter. In treatment, she was able to put her worrying thoughts into perspective and utilize skills to prevent the worry from escalating to being overwhelming. Sara believes that her concerns about her daughter's safety are justified and that they make her a more attentive parent.

## Clinical Issues and Summary

Research clearly supports the use of CBT interventions for a wide range of symptoms that are common in the aftermath of disasters. We have described a new treatment, CBT for postdisaster distress, that targets a range of postdisaster symptoms, rather than a specific disorder, making it more flexible and applicable to a wider range of problems. The use of a client workbook shifts the focus from a "mental health" treatment to a skills-based intervention and may therefore be less stigmatizing. For treatments to be effective, they must first be acceptable to the disaster survivor. CBT for postdisaster distress appears to be a promising method. Empirical evaluation of its outcomes is under way.

## Select References/Recommended Readings

Basoglu, M., Salcioglu, E., Livanou, M., Kalender, D., & Acar, G. (2005). Single-session behavioral treatment of earthquake-related posttraumatic stress disorder: A randomized waitlist controlled trial. Journal of Traumatic Stress, 18, 1–11.

Bisson, J., & Andrew, M. (2005). Psychological treatment of post-traumatic stress disorder (PTSD). Retrieved from The Cochrane Database of Systematic Reviews.

Bradley, R., Greene, J., Russ, E., Dutra, L., & Westen, D. (2005). A multi-dimensional meta-analysis of psychotherapy for PTSD. American Journal of Psychiatry, 162, 214–227.

Bryant, R.A., Moulds, M.L., Guthrie, R.M., Dang, S.T., & Nixon, R.D.V. (2003). Imaginal exposure alone and imaginal exposure with cognitive restructuring in treatment of posttraumatic stress disorder. Journal of Consulting and Clinical Psychology, 71, 706–712.

Foa, E.B., Hembree, E.A., Cahill, S.P., Rauch, S.A.M., Riggs, D.S., Feeny, N.C., et al. (2005). Randomized trial of prolonged exposure for posttraumatic stress disorder with and without cognitive restructuring: Outcome at academic and community clinics. Journal of Consulting and Clinical Psychology, 73, 953–964.

Foa, E.B., & Kozak, M.J. (1986). Emotional processing of fear: Exposure to corrective information. Psychological Bulletin, 99, 20–35.

Foa, E.B., Rothbaum, B.O., Riggs, D.S., & Murdock, T.B. (1991). Treatment of posttraumatic stress disorder in rape victims: A comparison between cognitive-behavioral procedures and counseling. Journal of Consulting and Clinical Psychology, 59, 715–723.

Hamblen, J., Gibson, L., Mueser, K., Rosenberg, S., Jankowski, K., Watson, P.J., et al. (2003). The National Center for PTSD's brief intervention for continuing postdisaster stress. Unpublished manuscript. White River Junction, VT: National Center for PTSD.

Hertlein, K.M., & Ricci, R.J. (2004). A systematic research synthesis of EMDR studies: Implementation of the platinum standard. Trauma, Violence, and Abuse, 5, 285–300.

Katz, C.L., Pellegrino, L., Pandya, A., Ng, A., & DeLisi, L.E. (2002). Research on psychiatric outcomes and interventions subsequent to disasters: A review of the literature. Psychiatry Research, 110, 201–217.

Mueser, K.T., Ronsenberg, S.D., Jankowski, M.K., Hamblen, J.L., & Descamps, M. (2004). A cognitive-behavioral treatment program for posttraumatic stress disorder in persons with severe mental illness. American Journal of Psychiatric Rehabilitation, 7, 107–146.

Norris, F. (2005). Range, magnitude, and duration of the effects of disasters on mental health: Review update 2005. Retrieved November 30, 2005, from http://www.redmh.org/research/general/effects.html

Norris, F.H., Friedman, M.J., Watson, P.J., Byrne, C.M., Diaz, E., & Kaniasty, K. (2002). 60,000 disaster victims speak: Part 1. An empirical review of the empirical literature, 1981–2001. Psychiatry, 65, 207–239.

Resick, P.A., Nishith, P., Weaver, T.L., Astin, M.C., & Feuer, C.A. (2002). A comparison of cognitive-processing therapy with prolonged exposure and a waiting condition for the treatment of chronic posttraumatic stress disorder in female rape victims. Journal of Consulting and Clinical Psychology, 70, 867–879.

Tarrier, N., & Sommerfield, C. (2004). Treatment of chronic PTSD by cognitive therapy and exposure: A 5-year follow-up. Behavior Therapy, 35, 231–246.